TECHNOLOGY AND STATE GOVERNMENT

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BROADLY conceived, technology is the most important single factor in producing, integrating and destroying cultural phenomena. Technology includes all tools, machines, utensils, weapons, instruments, housing, clothing, communicating and transporting devices and the skills by which we produce and use them. Social institutions and their so-called non-material concomitants such as values, morals, manners, wishes, hopes, fears and attitudes are directly and indirectly dependent upon technology and are mediated by it.

This is not technological determinism because all human activities are conditioned by man's biological nature, his physical environment and the technological and other cultural limitations to his manipulation of inorganic and organic materials. Consequently there is constant reciprocal interaction between technology and all other aspects of culture. Thus, the common distinction between material and non-material culture is unrealistic and unscientific. It is an aspect of that type of analysis I once called The Fallacy of Explanation by Reduction.[1]

If they are to be more than mere word juggling, the generalizations of social science must be derived by the approved methods of natural science. Many political scientists firmly believe their data cannot be studied in this manner. Their orientation is toward history, logic and law which are often far removed from cultural realities. Like the classical economists, they regard their data as logical abstractions rather than sense-observable natural phenomena. They proceed by deduction from *a priori* "first principles" rather than by induction from empirical data.

Some political scientists, however, are more realistic. For them, political activity is merely one aspect of integral group behavior; they notice all relevant psychologic, biologic, geographic, institutional and technological factors. They count, classify, generalize, test and develop instruments for more accurate observation and measurement. They are building an institutional, or sociological, political science. Recent studies of pressure politics, the press, non-voting, straw-voting, measuring public opinion, studies in administrative personnel and techniques, tax procedures, city-management systems, etc., are cases in point. But the influence of technology on political reality is still neglected. Standard texts on state government seldom refer to the recent technological revolution. *The Political Science Review* and *The Political Science Quarterly* for 1930–1935 inclusive, have only one

[1] Read Bain, "The Concept of Complexity in Sociology: II," *Social Forces*, March 1930, 376–377. For a good critique of the material and non-material culture concept, see M. Choukas, "The Concept of Cultural Lag Re-examined," *Amer. Sociol. Rev.*, 1, Oct. 1936, 752–760.

article dealing with this subject. One must mention the brilliant initial chapter on "Government in a Technological Society" in *The American Leviathan*. Even though the promise of this chapter is only indifferently carried out in the succeeding pages, Professor Beard is said to have stated that no one will use the book. In "A Program for Research in Political Science," 1933, an eminent man makes no reference to technological or other cultural changes as affecting government except for one topic out of twenty-nine, entitled "The Doctrine of Industries Affected with Public Interest" and here he deals only with conservation.[2]

My purpose is to consider some implications of technological change for the legislative reorganization. Though I shall deal primarily with structure, it must be remembered that both structure and function are merely terms for analyzing the groupal activities which constitute political reality. It is also clear that the term "legislative function" does violence to the concept of reciprocal interaction and destroys the organic wholeness of that delimited type of social behavior we call "political." The classical concept of legislative, executive, and judicial branches is an unrealistic logical scheme which is always violated in actual practice. This is equally true of the more realistic fivefold functional scheme: legislative, managerial, administrative, technical and judicial. Political activity, as Park and Burgess have pointed out, is concerned with the determination of policies within groups, with the methods of arriving at corporate or group consensus,[3] and, I would add, with carrying out the group decisions.

Hence, all five (or more) political functions always must be performed by all the so-called branches of government, as well as by every group in any society. The political function goes on continuously in all forms of societal organization. Therefore, in the legislative organization, the other four phases of political activity are always functioning; even in the technical staff, legislative, judicial, managerial and administrative functions are constantly observable. Likewise, everything that goes on outside of political organization is functionally interactive with the political institution and is

[2] Arthur F. Bentley, *The Process of Government*, Chicago, 1908, chap. XXI, "Underlying Conditions, Technique of Industry"; Charles A. and William Beard, *The American Leviathan*, New York, 1930, chap. I, "Government in a Technological Society"; see also C. A. Beard's *American Government and Politics*, 7th ed., New York, 1935, chap. XV, "Natural Resources," chap. XVI, "Communication and Transportation," chap. XIX, "Health, Safety, etc.," for some implications of modern technology for government; see also J. T. Young, *The New American Government*, 3rd ed., New York, 1933; and *Recent Social Trends*, chaps. XXV and XXVII, New York, 1933, for influences of technology on governmental functions. William Beard, "Technology and Political Boundaries," *Amer. Pol. Sci. Rev.*, August 1931, 557–572; William F. Willoughby, "A Program for Research in Political Science," *ibid.*, February 1933, 1–23. Leonard D. White in *Public Administration*, New York, 1926, on page 467, mentions in one short paragraph that office equipment has been completely transformed during the last ten years, but he shows no realization that these changes have had any great influence on the political realities of our time.

[3] R. E. Park and E. W. Burgess, *Introduction to the Science of Sociology*, Chicago, 1924, pp. 52–53.

reciprocally related to it. As Bentley says, the raw material of government is found in "the actually performed legislating-administering-adjudicating activities of the nation and in the streams and currents of activity that gather among the people and rush into these spheres."[4]

Therefore, legislative structure and function always include the managerial, administrative, technical and judicial functions performed by the legislature, and are influenced by the interests and activities of all other groups and institutions in the political area. All these groups are reciprocally interactive with all other groups in society. As Bentley well says, there is no such thing as the interest of society as a whole; there is only the interest of particular groups, and government is the adjustment or balancing of these interests.[5]

The interests or activities of groups are always mediated by technology. Groups and their activities are generated, conditioned and destroyed by technological changes, by the mediation of machines. It must be repeated that a technological device cannot be dichotomized into material and nonmaterial culture traits. A material construct that is not a complex unity of structure and function, that is not an organic whole of the skill and knowledge that makes and uses it, is no machine, has no meaning, and is not a cultural object at all.

Criticisms of state government have been mostly concerned with administrative reorganization. Since 1917 about half of the states have done something along this line, largely by attempting to increase the governor's power, to shorten the ballot, to collect the numerous diffuse, over-lapping agencies into a few departments responsible to the governor, and to diminish the waste, inefficiency and "invisibility" of state government.[6] But most of these efforts have not been very successful. They have been piecemeal and opportunistic; for the most part, they have failed to see that technological changes have created a new world of social realities. We have tinkered up a few obviously failing parts of the governmental machine, mainly administrative, without seeing the necessity for a thorough overhauling, or perhaps for a new model. Our chief interest in this paper is with the legislature, but it follows from our foregoing analysis that the whole political structure, legislative, administrative, judicial, managerial and technical, both local and state, must be involved in any reorganization which will meet the needs of our technologically mediated culture.

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[4] *Op. cit.*, p. 180. In "A Socialized State," *Commonwealth Review*, Eugene, Oregon, April 1921, 193 pp., I outlined a reorganization of state government from the point of view of sociology, but without proper attention to the technological factors.

[5] *Ibid.*, pp. 220, 264. For a recent sociological analysis of the political process, see K. Mannheim, *Ideology and Utopia*, L. Wirth and E. Shils, translators, New York, 1936, pp. 97–171.

[6] See the writings of A. E. Buck, J. M. Mathews, J. A. Fairlie, G. A. Weber, W. F. Dodd and the reports of administrative reorganization commissions in Illinois, New York, Massachusetts, Minnesota, Tennessee and Oregon.

Just what are some of these changes which make fundamental reorganization necessary? Basically, they center around transportation and communication which have revolutionized industrial production and distribution, which in turn have changed enormously the daily lives of the people. Space and time have shrunk, but state government is still essentially the same as it was in a slow moving, slow thinking, handicraft, agricultural age. It cannot do its work well enough and fast enough to meet the needs of an industrial age. Legislative problems are increasingly involved with technological problems. Eloquent orations about the rights of man and abstract freedom throw little light upon traffic control, sanitation, health and public utility regulation. These are technical matters and require legislators who can think in terms of technological necessities. Furthermore, these problems cannot be solved without reference to regional and even national considerations. Legislators must cease to think in terms of the "Great State of X." Modern government demands the services of scholars and experts, not provincial politicians, and a governmental organization designed and organized for the kind of work that must be done.

The new technology has destroyed many old alignments and old loyalties. It has given rise to innumerable groups whose very life depends upon technological factors. Kinship, landholding, religion and localism are replaced by interest groupings, labor and employer organizations, and tremendous mobility of persons and ideas. Pressure groups proliferate and almost all of them are closely related to technological changes. New types of social integration are dependent upon the printed word, the radio, the cinema, science, new machines, rapid movement from place to place and the still more rapid diffusion of knowledge of what is happening thousands of miles away, with a vivid realization that we are vitally influenced thereby. One of the results is a great increase of governmental functions. Almost all of them are a more or less direct result of technological changes and demand technical knowledge for their proper performance; but the state government remains essentially the same in its traditions, organization and practice. The expert is an object of suspicion and contempt, especially in the determination of policies. Much of the day's work can be done only by experts but frequently these technical positions are held by men who are expert only at serving politicians. It is interesting to compare modern business with state government. The former has responded to technological imperatives to a much greater degree than the latter has. In business, the expert and scientist with their technical knowledge and skill have come into their own. Responsibility is fixed; integration, efficiency and response to the changing interests and demands of consumers are highly developed. While we should not press the analogy too far, particularly as to effects upon general social well being, it is still possible that government may learn a great deal from modern business organization and practice.

In order to make these matters more concrete, we shall examine briefly some of the more marked technological changes in Ohio from 1880 to 1930. Their implications for state government are obvious to commonsense, but a great deal of intensive scientific research will have to be done before we can see the whole picture. What new classes and groups have been created? What, precisely, are their problems, and how are they related to other groups, to the whole society? What technical knowledge and skill are now available for their solution? What is needed which is now unknown? The following figures suggest hundreds of important questions for sociological and other scientific research, the answers to which are necessary for rational determination of governmental policies and their proper administration. It is safe to say that much more is known about these matters than the present governmental organization enables us to use. Perhaps the best argument for thorough reorganization is that it would enable us to use to better advantage the scientific knowledge and technological devices we now possess. Because of our inability to do this, we are paying much too much for what little we get.

Let us glance briefly at some of the technological contrasts between the Ohio of 1880 and that of 1930. The population increased from 3,198,062 to 6,646,697. In 1880, only two cities were over 100,000 and only fifteen had 10,000 or over. In 1930, eight were over 100,000, one over a million, another over a half-million and fifty-nine over 10,000. The number of farms decreased from 247,189 to 219,296, but the value of farms jumped from a little over a billion dollars to over two billion. The value of farm implements and machinery increased from $122.00 to $470.00 per farm. Horses decreased from 736,478 to 494,947; mules increased from 19,481 to 31,356, but the 8,226 work-oxen of 1880 were all gone.

The number of manufacturing establishments decreased from 20,699 to 11,855 but the value of goods produced rose from $378,298,390 to over $29 billions. The horsepower rose from 261,143 to 4,340,575. Iron and steel plants decreased from 134 to 88 but the value of products mounted from $34.9 millions to $817.8 millions. Agricultural implement factories fell from 436 to 19 and their products from $15.5 to $11.4 millions. In 1880, the 20 canning plants produced $885,105 but in 1930, the 106 plants produced $18.9 millions.

In transportation and communication a veritable revolution occurred. In 1880 there were 774 periodicals, 56 of which were dailies with an average circulation of 216,000. In 1930, there were only 552 periodicals, but 134 of them were dailies with a circulation of close to three million. Railway mileage was 5,415 in 1880; in 1927 it was 8,804, with 3,486 additional miles of street railways. Because of increased speed, size and number of trains, the ton and passenger miles increased at a still greater rate. In 1880, there were only 148 telephone exchanges in the U.S., 12 of which were in Ohio

with 2878 miles of wire. In 1927, there was 3.6 million miles of wire, over a million phones and over two billion calls in Ohio. In 1930, over 55 percent of the farm homes had phones, 29 percent running water and 26 percent electricity. The census does not give telegraph data by states, but in 1880 there were only 110,727 miles of wire, 31.7 million messages and 12,510 stations in the whole U. S. In 1930, for Ohio alone, these figures would probably have to be multiplied many times.

In 1880 there were no automobiles, airplanes, radios, phonographs, skyscrapers or cinemas. There were no electric lights, fans, refrigerators, heaters, air conditioners, sweepers, toasters, irons, washers, and a thousand other electric gadgets. There were few typewriters, no bookkeeping machines and automatic calculators. There has been a revolution in the technology of medicine, particularly in instruments for mechanical diagnosis, radiotherapy, the production and standardization of immune sera and the growing list of biologicals, to say nothing of an entirely new engineering science of water supply, sewage and garbage disposal and other sanitary devices. Derived from these and other technological changes, is the tremendous growth of multiple dwellings and the mushroom emergence of Suburbia, both of small importance in 1880. One should mention also the multiplication of postal services, school facilities, physical and mental mobility with all their attendant modifications of culture.

The foregoing paragraphs just sketch the tremendous proliferation of technological devices during the last fifty years. What is not known and what only intensive research can discover, is how human nature,—the habits, skills, and values of people,—has been affected by them. What new orders of social phenomena have been created? What changes in social organization are indicated? Many changes in social reality have occurred and have produced changes in the structure and functioning of societal organizations, but these changes have been largely the result of often blundering common-sense. Social science has played little part in it. When the advice of social scientists has been sought, frequently they have paid small attention to the technological implications of the problems they have attempted to solve. Many of them know who developed the theories of co-ordinate branches and social contract but few know or care who invented the typewriter, vacuum tube or dynamo—or when. Their knowledge of technology is little greater or more accurate than that of the man on the street and they see no connection between it and the social data with which they are attempting to deal.

Therefore, since scientific knowledge of how societal reality has been changed by modern technology is largely lacking, the proposals for reorganizing state government in harmony with a technologically mediated culture must be based largely on common-sense. However, in the light of the glaring inadequacy and inefficiency of present state government, such a plan,

or one similar, will be tried sooner or later. Social scientists should be doing the basic research necessary to make such a plan succeed. If it were actually operating, certainly it would have to be revised continually because the underlying social realities will be changed radically by present and prospective technological innovations.

A recent writer has said, "Technological Imperative is impersonal, a-moral, and non-ethical. Like the Nile, it sets the boundaries within which a given culture must operate." One of his imperatives is centralization of government, revised and simplified political forms and the scrapping of outworn political boundaries and constitutional checks and balances where the issues involved are technical.[7] Hence, I will not discuss whether the suggested changes are constitutional, democratic, American, or in harmony with any other set of present values. If these changes are implicated in technologically mediated social realities, they will occur. If they occur, it will be easy to revise constitutions, redefine democracy and reverbalize Americanism. If the necessary changes in governmental structure and function do not occur, political revolution may occur.

I shall sketch a legislative organization designed to remedy some of the present shortcomings and show how it might function in a state like Ohio.

The legislature should consist of not more than twenty-five highly qualified members elected for long terms from a small number of districts. Continuity should be provided by the device of overlapping terms. The presiding officer of the legislature should perform the official, honorary functions of present governors. Most of the other duties now performed by governors should be delegated to a State Manager, elected or appointed by the legislature for an indefinite term. The manager should appoint the department heads who should be responsible to him.

Technical staffs of all departments should be selected by a civil service system so organized as to obviate the defects of most present civil service systems. Both technical and non-technical permanent employees should have secure tenure and be removable only after a fair hearing. When a governmental function is discontinued or curtailed, employees should be transferred, if possible, to other similar work. Otherwise, they should be paid a generous dismissal honorarium. All temporary employees should be hired for the probable duration of the work and be dischargeable only after a fair hearing. All permanent employees should automatically retire at sixty-five under a voluntary contributory pension plan. All employees should be encouraged to belong to unions or other organizations which can represent them in matters pertaining to tenure, pay and other employee interests.

The legislature should be in continuous session. Its chamber should be small enough to discourage oratory. It should operate much like a board of

[7] Stuart Chase, *The Economy of Abundance*, New York, 1934, p. 311.

directors except that the press should always be present. Actual sessions should occur only two or three times a week. Most of a legislator's work would be done in his office. Skilled reference, drafting and secretarial services should be provided.

Bills may be introduced by any legislator, by the State Manager, or by any registered interest group, all of whom should have access to the reference and drafting services. The registered interest groups should meet all requirements established by law to insure that they really represent actual, functional groups in the community. If the Legislature decides to consider a bill, it should be circulated to all interest groups and be available to any citizen. Final action should not be taken before an adequate time for statewide discussion has elapsed, perhaps ninety days. During this period, it should be illegal for anyone, individual or interest group representative, to try to influence legislators except by argument in open legislative session, but the legislature should receive all petitions and interest group communications concerning the proposed law and have the power to call any person and compel his attendance. The legislature should always act as a unit; there should be no committees. More than a majority, perhaps two-thirds of all members, should concur before a bill can become a law. There is no reason why a law should not go into effect immediately, or at the discretion of the legislature, since the referendum cannot be invoked until it has been operating for a year.

If the legislature fails to consider a bill or acts negatively on it, the initiative may be used. This should be made more difficult than is the case in most states at present. The same is true of the referendum. The proper procedure is for the people to influence the legislature by means of interest group pressure, or by using the election and recall—the recall only as a last resort. Judges should all be appointed and not be subject to recall, but every six or eight years the people in their jurisdictions should have a chance to vote on whether they should be retained. The legislature may submit amendments to the Constitution which can be adopted only by the people in a general election and should require at least a majority of all votes cast in the preceding presidential election. It should be more difficult to propose an amendment to the Constitution by initiative than to propose an ordinary law, but it should be possible.

We cannot discuss the judiciary except to say that the Supreme Court should not be able to declare a law "unconstitutional" unless it is clearly contradictory to an existing law; then it must declare the latter "unconstitutional." The Court must pass upon all laws before they go into effect; if it holds by a three-fourths vote that a law violates the Constitution, it must return it to the legislature with suggestions as to how it may be made constitutional; if it thinks that is impossible, it must suggest a proper constitutional amendment to accomplish what the legislature has in mind.

It is also the duty of the Court to see that specific acts do not get into the Constitution. For example, if the Constitution gives the legislature the taxing power, there is no place in the Constitution for a millage limitation on real estate (which now exists in Ohio and several other states) and no law levying taxes, either as to kind or amount, could ever be declared unconstitutional.

The legislature must fill vacancies in its membership between elections from nominations made by the registered interest groups in the district. Each group may submit only one name. They may also submit petitions or other evidence in support of their nominee. Regular elections should be by non-partisan, preferential ballot. There should be no primary elections and any qualified citizen should be permitted to run for office merely by filing his name. A candidate should not be younger than thirty nor so old that his term will carry him beyond the retirement age of sixty-five. He should have completed successfully at least one year of graduate work in some field of social science in an accredited university, present a certificate of mental and physical health, and be a resident of his district. The salary should be large enough to attract competent men, perhaps five thousand a year in a state like Ohio.

No candidate should be allowed to speak publicly or privately in his own behalf or for another candidate and no paid advocate should be allowed to speak for him. Groups favoring his candidacy should be permitted to spend only a limited amount—and it should be small. His merits and demerits should be discussed by citizens, the press, and the various interest groups. It should be regarded as fundamentally un-American and undemocratic for a man to seek this office for personal or interest group reasons. The office should seek the man—a citizen of known capacity and integrity, who is willing to serve his state to the best of his ability.

This is a skeletonic outline of a state legislature in the age of machines. What are the cultural realities, technologically mediated, which make such a scheme, or one similar to it, reasonable? What are the conditions in a state like Ohio which make such a proposal worthy of consideration?

The legislature should be small in number and sit in a small room because it should not be a debating society. The technological changes in science and industry have destroyed forever the possibility of sane political control by oratory. Government is becoming increasingly a matter of facts and figures, maps, graphs, and mathematical formulas. Men must govern and be governed by their eyes and intelligence, not by their mouths and viscera. Meaningful communication by the spoken word becomes increasingly difficult and inefficient in an age of science. That government is best which governs most—and most efficiently. Government by hortatory talk is the acme of inefficiency, especially in states like Ohio where there are 4,201 political units voting on men and measures.

There are still 88 counties in Ohio as there were in 1851. These counties are the vermiform appendices of state government, vestigial remains of horse and buggy, ox-cart days. These counties spent $38,081,510 in 1914, about $7.37 per capita. In 1931, they spent $85,531,850, or $12.70 per capita. In that period, population increased about 30 per cent while county expenditures increased 125 percent.[8] In the other 4,113 units, the increase was doubtless as much or more. At the moment, it is difficult to say just how much the people of Ohio spend for all their governmental activities. It is still more difficult to tell what they get for it and quite impossible to tell what they should be getting. The cost of operating and maintaining all state departments in 1915 was $3.24 per capita; in 1931, it was $7.45, an increase of 130 percent, while population increased 34 percent. In 1915 there were 21 states with a lower cost than Ohio; in 1931, only three. The lowest state in 1915 and 1931 was South Carolina with $1.64 and $7.24, an increase of over 340 percent. The highest state in both years, Nevada, rose from $10.36 to $26.80, an increase of about 160 percent.[9]

It is notorious that the tax burden has increased alarmingly in all departments of government. The services rendered have also increased and must continue to do so. Ohio has lagged far behind other states in this respect. It is imperative that governmental reorganization for greater efficiency must be more radical and thorough than any so far undertaken.

The accompanying chart shows a suggested consolidation of the 88 counties into 15 legislative districts. Seven of them are essentially metropolitan areas, four with two or more representatives. The unit of representation is roughly 300,000 (close to the congressional quota) and the area is such that any citizen can visit the county seat and return to his residence in a half day. Even in such large counties, modern communication and transportation would put each citizen closer to all other citizens than was the case in any of the present counties fifty years ago. Proper districting would disregard present county lines and be based upon an intensive study of the technological, geographic, economic and density factors, in short, upon human ecology. However, the proposed scheme is a rough approximation to these desiderata and changes could be made as conditions demand. Of course, the county governments should be of the commission-manager type with preferential ballot.[10] They should follow the general outline of the state government. At present, county government is probably the most inefficient of all the political units in America.

Nothing need be said in defense of the one house legislature. During the last twenty years, it has become almost axiomatic with political scientists.

[8] Information from the Ohio Institute, 150 E. Broad Street, Columbus, Ohio.

[9] *Financial Statistics of States*, U. S. Bureau of the Census, 1915, p. 92; 1931, p. 88.

[10] P. W. Wager, "State Centralization in North Carolina," *Amer. Pol. Sci. Rev.*, November 1931, 996–1003; Wm. R. Bradshaw, "County Managerial Tendencies in Missouri," *ibid.*, 1008–1013.

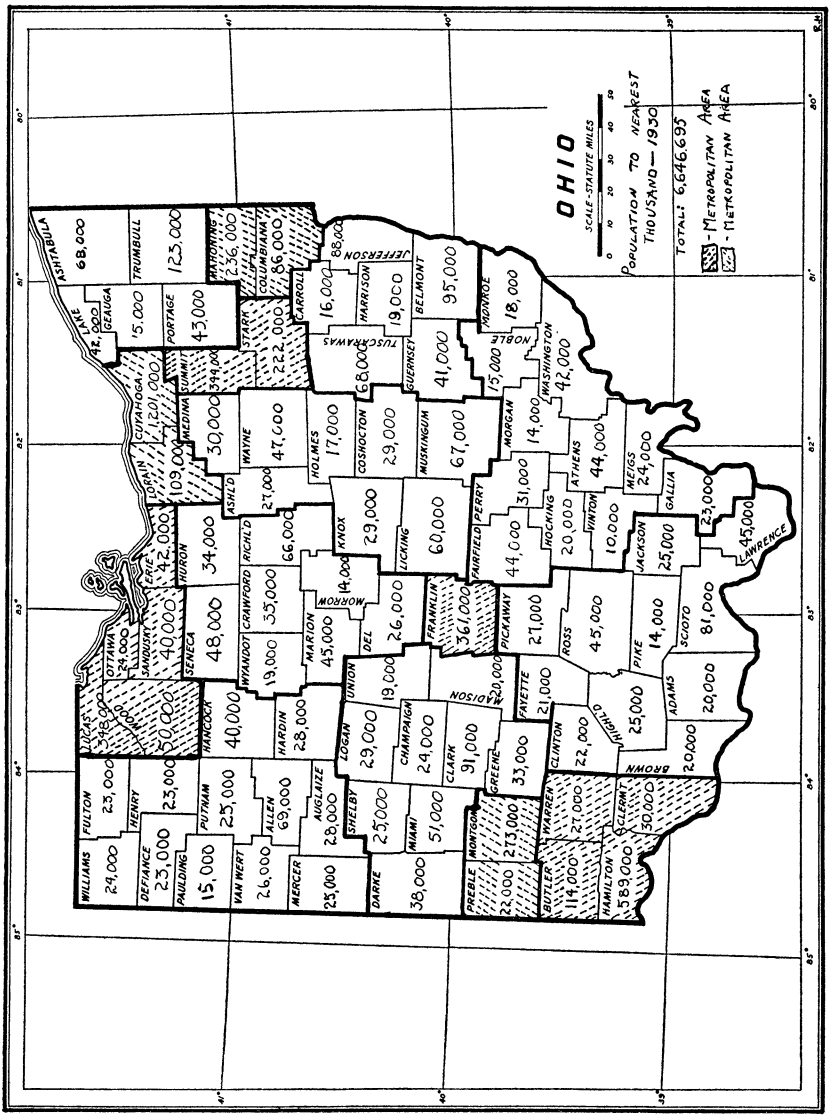

CHART I—PROPOSED LEGISLATIVE DISTRICTS IN OHIO

In connection with the above scheme, it is interesting to note that Senator Norris's original proposal was for one house of 20–30 members, with four-year terms at "good" salaries, in continuous session, elected on a non-partisan ballot.[11] Political exigencies required some modification, but the form adopted may prove to be a great step in state government.

Some may object that 25 men at $5,000 a year, plus $2,000 for each of their secretaries is too much to spend for legislation. Suppose we allow $50,000 for the Reference and Drafting Bureau, as against the $10,000 actually spent in 1935, and $50,000 for printing, supplies and incidentals, although under our system printing and supplies would be greatly reduced. This makes a total of $275,000 a year as against the $1,166,000 actually spent by Ohio for legislation in 1934–35.[12] Even if the cost of the legislative function were $500,000 a year, it would be less than one-half of one percent of the total budget as of 1935, to say nothing of rendering much better service. (The cost in most states for the legislature is from 2–3 percent of the budget.) The state judiciary cost over $850,000 in 1935, Boards and Commissions, $3.5 millions and all administration, $8.25 millions. Obviously, our legislative expense is quite low compared to its admitted importance. If we were getting expert legislative service, with a state manager in place of the present cumbersome, overlapping inefficiency, we probably could furnish all present state services for half the cost and do a much better job.

A question of great importance is that of Boards and Commissions. If their work is technical, they have no right to exist; if they are policy-making bodies, they represent delegated legislative power. They are thus necessary under present conditions because policy-making is a continuous function, and our legislatures are adjourned most of the time. Under our proposed plan their functions would be divided between the legislature and the managerial, administrative and technical staffs. Therefore, all or most of them could be abolished. But it should be borne in mind that when the State Manager appoints a department head, this man is also the manager of his department, that is, he is a policy-maker within the statutory limits of his function. He also necessarily performs judicial functions and hence this should be formally recognized by a system of administrative courts.

Some employees should not be placed under classified civil service. This is particularly true of positions which involve managerial or close personal and confidential relations such as private secretaries, college presidents and professors. Let us consider higher education. The Administrator of Educa-

[11] J. P. Senning, "Nebraska Provides for a One-House Legislature," *Amer. Pol. Sci. Rev.*, February 1935, 69–74. For unicameral superiority, see W. F. Willoughby, *Principles of Legislative Organization and Administration*, Washington, D. C., 1934, pp. 222–234. See also the 1933 revision of *The Model State Constitution*, with articles on legislature, H. W. Dodds; executive, John A. Fairlie; budget, A. E. Buck; judiciary, W. F. Dodd; counties, R. S. Childs.

[12] Ohio Director of Finance, 1935, *Report*, p. 279.

tion should appoint the president of a university with the aid and advice of the immediately concerned interest groups. When a vacancy occurs, the faculty of the university, the alumni of the institution, and perhaps the students, the State College Teacher's Association or Union and possibly several other interest groups, should each have the right to present to the Administrator of Education the name of a man who meets the qualifications previously established by it. From this list, and after considering the arguments of all registered interest groups that care to make their representations, the Administrator of Education should make the appointment.

How should presidents be removed? The general principles set forth above would apply. Any interest group that can name a candidate can also start action for his removal. If it is a question of sanity or health, a board consisting of the heads of the state medical and psychiatric institutions would pass upon the case; if it is a question of competence or conduct, a board consisting of one appointed by the president's professional organization, one by the Department of Education and a third by these two should hear the case. Or the Legislature on its own initiative may institute such a hearing by a similarly constituted board on any president, business manager, or head of any state department or institution. In all such cases, the recommendations should be advisory, not mandatory; the final responsibility for the discharge should rest upon the authority that appointed the officer. The Legislature should have the power of interpellation for all managerial and administrative heads as well as for the heads of all registered interest groups.

It is obvious that professors, like private secretaries, should not be selected by a classified civil service procedure. The Legislature might legitimately prescribe the general qualifications for college teachers but the president of the school should have wide latitude and final responsibility. However, he should not be able to discharge a professor except under a procedure similar to the one outlined for his own discharge. In a college, everybody except the president, deans, professors, business managers, and private secretaries of professors and administrative officers should be under civil service. The same general principles of dismissal should apply to all state employees.

Some may think interest groups are given too much prominence. The theory back of it may be stated in three propositions. First, they represent vital centers of societal energy at present expressing itself in various forms of open, secret and even corrupt lobbying and socially detrimental propaganda. This energy should be utilized legally and openly for constructive purposes.[13]

[13] For a general summary of this, see *Annals Amer. Acad. Pol. and Soc. Sci.*, May 1935, "Pressure Groups and Propaganda"; see also E. P. Herring, *Group Representation Before Congress*, Washington, D. C. (Brookings Institution), 1929, and his *Public Administration and the Public Interest*, New York, 1936; P. Odegard, *Pressure Politics: The History of the Anti-Saloon League*, New York, 1928.

Second, political life would be much more vital if it were expressed through agencies which people voluntarily support. People are human by virtue of their group activities. This is the logical and psychological basis for effective political representation. Unless the ballot supports something close and important to the people, it tends to become a laughing stock. Only about half the eligible electors now vote. It is true that social control can be utilized to increase the vote about ten percent, as Merriam and Gosnell have shown,[14] but it is somewhat disillusioning to think of the great apathy and cynical indifference which surrounds suffrage. We have to drum up voting interest like barkers at a sideshow and even then we fail. When a man will sell his vote for a cigar or give it to the loudest shouter, democracy is sick. Dodd says there are two functions state government should perform, "Do the State Business Efficiently," and "Provide Effective Popular Control Over Policies."[15] We fail in both. If we can integrate the interest groups with the policy-making function, citizens will have a vital personal interest in government. Under these proposals, they will not vote so often, but they will be voting for able men worthy of respect and confidence, for men who must assume great responsibilities but who are given adequate power to discharge them responsibly.

Third, since policy-making is a continuous function, the interest groups should be playing an effective part in it all the time. This is provided for by allowing them to suggest and oppose bills, make nominations for managerial, administrative, and judicial officers, and by making them the agencies through which the initiative, referendum and recall are invoked. These last three functions should not be exercised very often. Hence, it is made rather difficult to invoke them, but they must be available to provide for adequate popular control. This is especially true if we achieve non-partisan politics, an apparent necessity if political activity is to consist of rational consideration of men and measures. Under the party system, the men we vote for are often tools of the political bosses and predatory classes and the so-called issues are usually fictitious bogies and fantastic promises to frighten and cajole ignorant and uninterested voters.

These proposals are based on the theory that societal phenomena are largely mediated by technology and that much of our governmental structure antedates the age of machines. The actual business of government is done largely by machines, but the machinery of government creaks in every bearing. We must of necessity use technical knowledge and skill in public business, but the organization of state government, and often its personnel,

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[14] C. E. Merriam and H. F. Gosnell, *Non-voting: Causes and Methods of Control*, Chicago, 1924; H. F. Gosnell, *Getting Out the Vote: An Experiment In Stimulating Voting*, Chicago, 1927. He shows that in presidential elections the male and female "normal" percentage can be raised from 68.6 to 77.5 and from 49.8 to 59.9 respectively; in local elections, from 35.3 to 47.3 and 24.4 to 33.4.

[15] Walter F. Dodd, *State Government*, New York, 1928, p. 568.

are cultural anachronisms. The study of government must be reoriented toward natural science, both as to method and point of view. Societal inventions must be made which will enable us to integrate with governmental structure and function the mechanical inventions and technological factors which create, modify and mediate human group behavior. Political scientists must realize that their data are the societal implications of the factory, the automobile, the airplane, the printing press, the postal system, the radio.[16]

Technology creates and destroys groups; it modifies those that survive; these groups are the fundamental societal realities with which government must deal; more accurately, they *are the very stuff of the political institution.* They must become an integral, functional part of political organization. Men make machines, but they also are made by machines.

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[16] *See Annals Amer. Acad. Pol. and Soc. Sci.*, January 1935, "Radio: The Fifth Estate."